

Work Order ID 159967

Wednesday, April 19, 2017 4:31:24 PM

159967

Page 1

Item ID: D205-634-011 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Skidtube with Standard Wearplates Fits LH or RH
 Start Date: 5/11/2017 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 5/18/2017 Req'd Qty: 1.00 ***1*** Customer:
 Reference: SCHEDULED/S

Approvals: Process Plan: DAS 21 Date: APR 20 2017 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: DAS 21 Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI9468	A								
IIN D205-634	H								
100	Document Control	DAS 6 9-89		MAY 20 2017					
100									
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D205-634-011 CHG 010 CHG 011								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									

B159947

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>159967</u> Part No. <u>D205-634-011</u> NCR No. _____		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☒ Quality ☐ Other ☐					
Date : <u>17/5/23</u>		Step #: <u>100</u>		QTY Effective : _____			MRB (QSI042) Approval DAS 12 9-89 <u>17/5/23</u>		
Description Work Order Deviation <u>Wearplates no longer have gaskets.</u>				Disposition <u>Kit is now CHG 011</u> <u>CAR 17-168</u>				Completed By DAS 12 9-89 <u>17/5/23</u>	
				Lead hand / Supervisor Approval Verification				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐						Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
		OTHER : _____							

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159967

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Stop *NS2*

Start Date: 5/11/2017 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 5/18/2017 **Req'd Qty:** 1.00 ***1***

Customer:

Reference: SCHEDULED/S

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120 QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.03

Quality Control

MAY 29 2017

130

0.00

130

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D205-634-011
Location: FG084

DAS 27 9-89 — DAS 28 9-89

MAY 29 2017

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.10

Quality Control

DAS
21
2-89

MAY 20 2017

DAS
21
9-89

MAY 29 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
82 2017								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, April 19, 2017 4:31:24 PM

Work Order ID: 159967 *159967*
 Parent Item: D205-634-011 *D205-634-011*
 Parent Item Name: Skidtube with Standard Wearplates Fits LH or RH

Start Date: 5/11/2017 Required Date: 5/18/2017
 Start Qty: 1.00 Required Qty: 1.00

Comments: IPP Rev:P02.08.28Removed QC5 from Step 5KJ
 IPP Rev:Q 08-08-12 now @ chg 006 (DSI 9417) DD verf:EC
 IPP Rev R 09.01.28 now chg 007 DSI9417 revB EC verf:DD IPP Rev:S
 10.12.01 as per chg008 DD verf:EC IPP REV:T 12.01.23
 AS PER ECN11-684 VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D205-634-041		Manufactured	No			110	Each	0.0000	1	1			
D205-634-041									**				
Replacement Skidtube with Standard Wearplates Fits LH or RH													
K10003		Manufactured	No			110	Each	5.0000	1	1			
K10003									**				
Saddle													
				<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>							
				FG129	5								
				159383	3								
				159384	2								

B159947 DAS 27 9-89
 B159966 DAS 27 9-89

MAY 29 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER :							

DART SERVICE INSTRUCTION

TO AMEND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D205-634 Rev. 3

REF. CANADIAN STC: SH96-88

REF. FAA STC: SR00563NY

REF. EASA STC: EASA.IM.R.S.01303

PURPOSE:

The parts list of Instructions for Continued Airworthiness ICA-D205-634 Rev. 3 lists the incorrect washer for the D3407-041 Tow Ring Assembly. The correct washer is the D3417-5 Washer, which has a groove to fit the ridge on the sides of the Dart skidtube.

CHANGE:

The parts in section 32.9 (pg. 35) of ICA-D205-634 Rev. 3 is amended as follows:

ITEM	634 -011	634 -015	634 -041	634 -045	641 -011	PART NUMBER	DESCRIPTION
	X					D205-634-011	SKIDTUBE INSTALLATION, (STANDARD)
		X				D205-634-015	SKIDTUBE INSTALLATION, (MODIFIED)

IS:

44	2	2				D3417-5	WASHER
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WAS:

44	2	2				D3417-3	WASHER
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SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 159967 MJS
1207-20

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 09.06.30
CERT. NO.: SH96-88
ISSUE NO.: 3

A	NEW ISSUE , REF CAR 09-001	CP	09.06.30
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9468	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		PARTS LIST CORRECTION	NTS
DATE	09.06.30	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Work Order ID 159967

Wednesday, April 19, 2017 4:31:24 PM

159967

Item ID: D205-634-011 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Skidtube with Standard Wearplates Fits LH or RH
 Start Date: 5/11/2017 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 5/18/2017 Req'd Qty: 1.00 *1* Customer:
 Reference: SCHEDULED/S Run Start *NR1*
 Stop *NR2*

Approvals: Process Plan: Date: Tooling: Date:
 QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
DSI9468	A								
IIN D205-634	H								
100	Document Control	0.00							

100

DC

Doc.Control -USB or Paperwork



Memo

Photocopy bluefile & type labels per PPP D205-634-011

CHG-010

CHG-010

110

Pick Kit

0.00

110

Packaging

Packaging

Memo

0.00

CB

MAY 29 2017



Transport
Canada

Transports
Canada

Department of Transport

Supplemental Type Certificate

This approval is issued to:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ontario
Canada K6A 1K7

Number: SH96-88

Issue No.: 3

Approval Date: November 20, 1996

Issue Date: January 24, 2007

Responsible Office:

Ontario

Aircraft/Engine Type or Model:

BELL 204B, 205A, 205A-1, 205B, 212, 214B, 214B-1, 412,
412 CF, 412 EP

Canadian Type Certificate or Equivalent:

BELL 205B H-104
BELL 214B, 214B-1 H-80
BELL 212, 412, 412 CF, 412 EP H-86
BELL 204B, 205A, 205A-1 H1SW

Description of Type Design Change:

Skidtube Installation

**Installation/Operating Data,
Required Equipment and Limitations:**

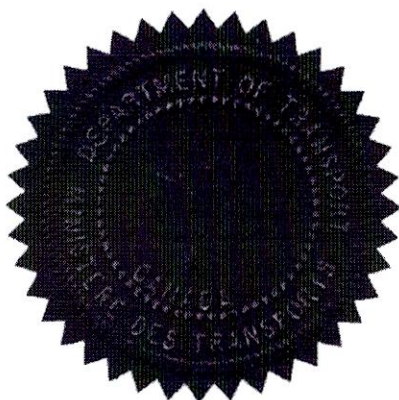
Manufacture of the Skidtube Installation, including associated saddles, must be in accordance with Dart Aerospace Ltd. MDL-D205-634, Revision A, approved April 13, 2006, or later approved revisions.

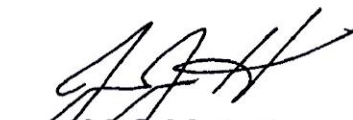
Installation of the Skidtube Installation, including associated saddles, must be in accordance with the Dart Aerospace Ltd. Installation Instruction as shown on the accompanying Applicability List.

Maintenance of the Skidtube Installation, including associated saddles, must be in accordance with the Dart Aerospace Ltd. Instructions for Continued Airworthiness as shown on the accompanying Applicability List.

See continuation sheet

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.




M. G. Mariotti
For Minister of Transport

Canada